# **TA-F505ES**

### **SERVICE MANUAL**

### AEP Model



#### **SPECIFICATIONS**

#### **Amplifier section**

Items	Condition	Da	ta
		Model for Scandinavian countries, Switzerland, Spain and Portugal	Model for other countries
Continuous RMS power output (both channels driven	4 ohms, 20Hz – 20 kHz		100 W + 100 W (DIN: 120 W + 120 W)
simultaneously)	6 ohms, 20 Hz – 20 kHz	90 W + 90 W (DIN: 100 W + 100 W)	_
	8 ohms, 20 Hz – 20 kHz	80 W + 80 W (DIN: 90 W + 90 W)	
Power band width	8 ohms, THD 0.05%	10 Hz – 100 kHz at	40 W
Dynamic headroom	4 ohms	1.9 dB	
- Industrial	8 ohms	1.1 dB	
Total harmonic distortion	8 ohms at 10 W output	0.008%	
Intermodulation (IM) distortion 60 Hz: 7 kHz =	4 ohms, at rated output	0.008%	·
4:1	6 ohms, at rated output	0.006%	
	8 ohms, at rated output	0.004%	
Damping factor	8 ohms, at 1 kHz	80	
Residual noise	network A, 8 ohms	less than 110 μV	
Frequency response	PHONO MM (20 Hz – 20 kHz)	RIAA equalization curve ±0.2 dB	
	TUNER, CD TAPE 1, 2, 3, DIRECT IN	2 Hz – 200 kHz <sup>+0</sup> c	IB

Items	Condition	n	Data		
Input sensitivity	PHONO	мс	0.25 mV/100 ohms		
		ММ	2.5 mV, 50 kilohms		
	TUNER, CD, DIF IN, TAPE 1,2,3, ADAPTOR, AUX		150 mV, 20 kilohms		
S/N (network)	PHONO	МС	76 dB (0.5 mV)		
	MM		93 dB (5.0 mV)		
	TUNER, CD, DIF IN, TAPE 1,2,3, ADAPTOR, AUX	RECT	105 dB (150 mV)		
Output voltage impedance	REC OUT 1,2,3 ADAPTOR		150 mV, 1 kilohm		
	HEADPHONES		25 milliwatts (at 8 ohms) Accepts low and high impedance headphones		
Tone controls	BASS, at 100 Hz	:	±7 dB		
	TREBLE, at 10 k	Hz	±7 dB		
Subsonic filter	_		6 dB/octave attenuation below 15 Hz		
Muting			-20 dB		

Continued on next page —



#### General

System

Preamplifier section: Low-noise high gain NFB type equalizer amplifier, passive type direct tone control

Power amplifier section: Pure-complementary SEPP MOS-FET power amplifier

Power requirement

Models for European countries: 220 V - 230 V AC, 50/60 Hz

Power consumption

Model for Scandinavian countries, Switzerland, Spain and

Portugal 180 W

Model for other European countries

240 W

Dimensions

Approx. 430 x 150 x 375 mm (w/h/d)

(17 x 5 <sup>7</sup>/<sub>8</sub> x 14 <sup>3</sup>/<sub>4</sub> inches)

Approx. 14 kg (30 lb 14 oz)

Supplied accessories

Screws (4)

The above values are measured at 230 V AC.

Design and specifications are subject to change without notice.

#### Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

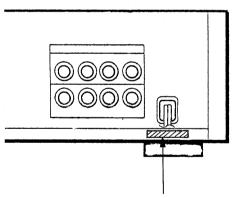
#### Note:

There are two types of power transformer (T901) in German model. When ordering the power transformer, check the part No. of it.

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#### MODEL IDENTIFICATION - BACK PANEL -



4-944-612-1□ AE2 (AEP2) : Scandinavian countries, Switzerland, Spain and Portugal

4-944-612-0□ AE1 (AEP1) : Other European countries

4-944-612-0□ G : Germany

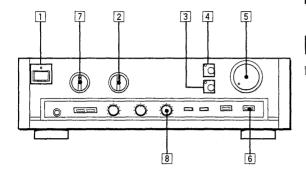
#### SAFETY-RELATED COMPONENT WARNING!!

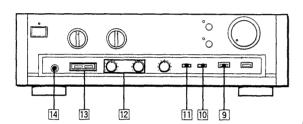
COMPONENTS IDENTIFIED BY MARK A OR DOTTED LINE WITH MARK A ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUB-LISHED BY SONY.

### SECTION 1 GENERAL

### Identifying the Parts and Controls

### This section is extracted from instruction manual.





#### Front Panel

□POWER switch and indicator
After the power is turned on, the standby indicator lights in red as the built-in muting circuit activates. When the amplifier stays in a stable operating condition, the indicator lights in green. The indicator lights in red if the unit detects shorting of circuit of the speaker outputs or in case of short-circuit of the inputs of DC components. In such a case, disconnect the power source and check the connected components and speaker systems.

#### 2 INPUT SELECTOR

Selects the desired program source for listening.

- 3 SOURCE DIRECT button and indicator When the button is pressed, the orange indicator lights and the circuits of the TONE control, SUBSONIC filter button, BALANCE control and MODE selector are disengaged regardless of the setting of the switches.
- ⚠MUTING button and indicator Press the button to reduce the sound level by -20 dB. (Output voltage becomes 1/10.) Generally, set the button to off.

#### 5 ATTENUATOR control

Adjusts the sound level. To increase the sound level, turn the control clockwise. To decrease the level, turn the control counterclockwise.

#### Note

Turn down the sound level before switching on the unit.
This prevents damage to speakers.

**©**CARTRIDGE selector Set the selector according to your cartridge

MM: For moving-magnet type cartridge. MC: For moving-coil type cartridge.

7 REC OUT SELECTOR

Selects the program source sent to the REC OUT jacks for recording.

8 BALANCE control
Adjust BALANCE to correct ster

Adjust BALANCE to correct stereo imaging, when the speaker position is not symmetrical.

DIRECT INPUT selector
 Set to SOURCE to select program source with the INPUT SELECTOR.
 To listen to a program source processed through the equipment, such as graphic equalizer, connected to the ADAPTOR jacks, set it to SOURCE.

To listen to a program source connected to DIRECT IN jacks, set it to DIRECT.

SUBSONIC filter button If subsonic noise components created by warped records, etc. are present, the audible range frequencies may be modulated and cause irritating intermodulation distortion. In this case, press the button to reduce noise components of less than 15 Hz, which

IIIMODE selector STEREO: For listening to a stereo program. MONO: For listening to a monaural program.

cause modulation noise.

12 BASS and TREBLE TONE controls Adjust the tone quality. To increase bass or treble sound, turn the control clockwise. To decrease them, turn the control counterclockwise.

3 SPEAKERS buttons Select speaker system A, B, or A and B. To drive speaker system A: Press A button

To drive speaker system B: Press B button.

To drive speaker system A and B: Press both A and B.

For headphones listening only: Press both A and B to OFF  $(\square)$ .

MHEADPHONES jack
Connect the stereo phone plug of headphones.

## SECTION 2 ELECTRICAL ADJUSTMENTS

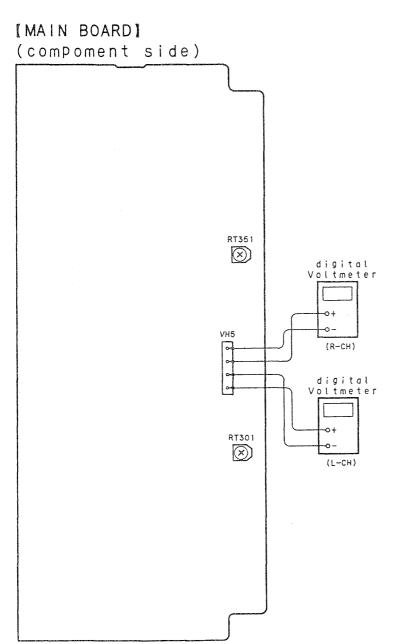
#### Bias Adjustment

Note: Adjust the idling after tuning the unit on for about 10 minutes, giving it time to warm up.

#### Procedure:

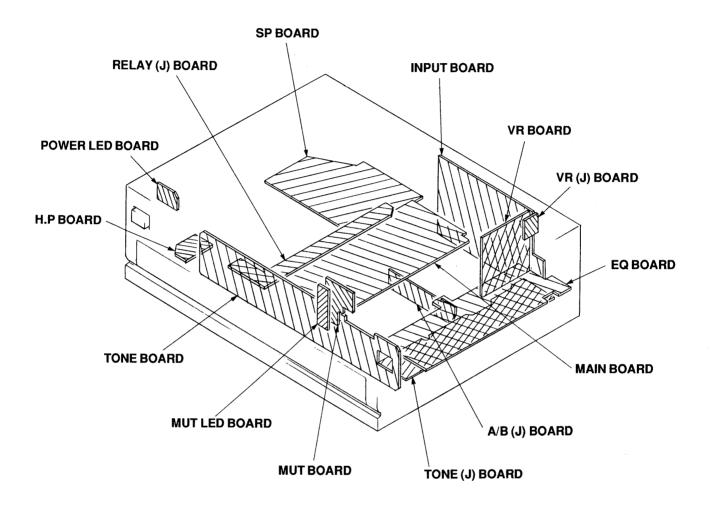
- 1. Connect the digital voltmeter to VH5 on main board as follows.
- 2. Adjust RT301 (L-CL) and RT351 (R-CH) so that the digital voltmeter on signal reads 30 mV at VH5.

#### Adjustment Location:

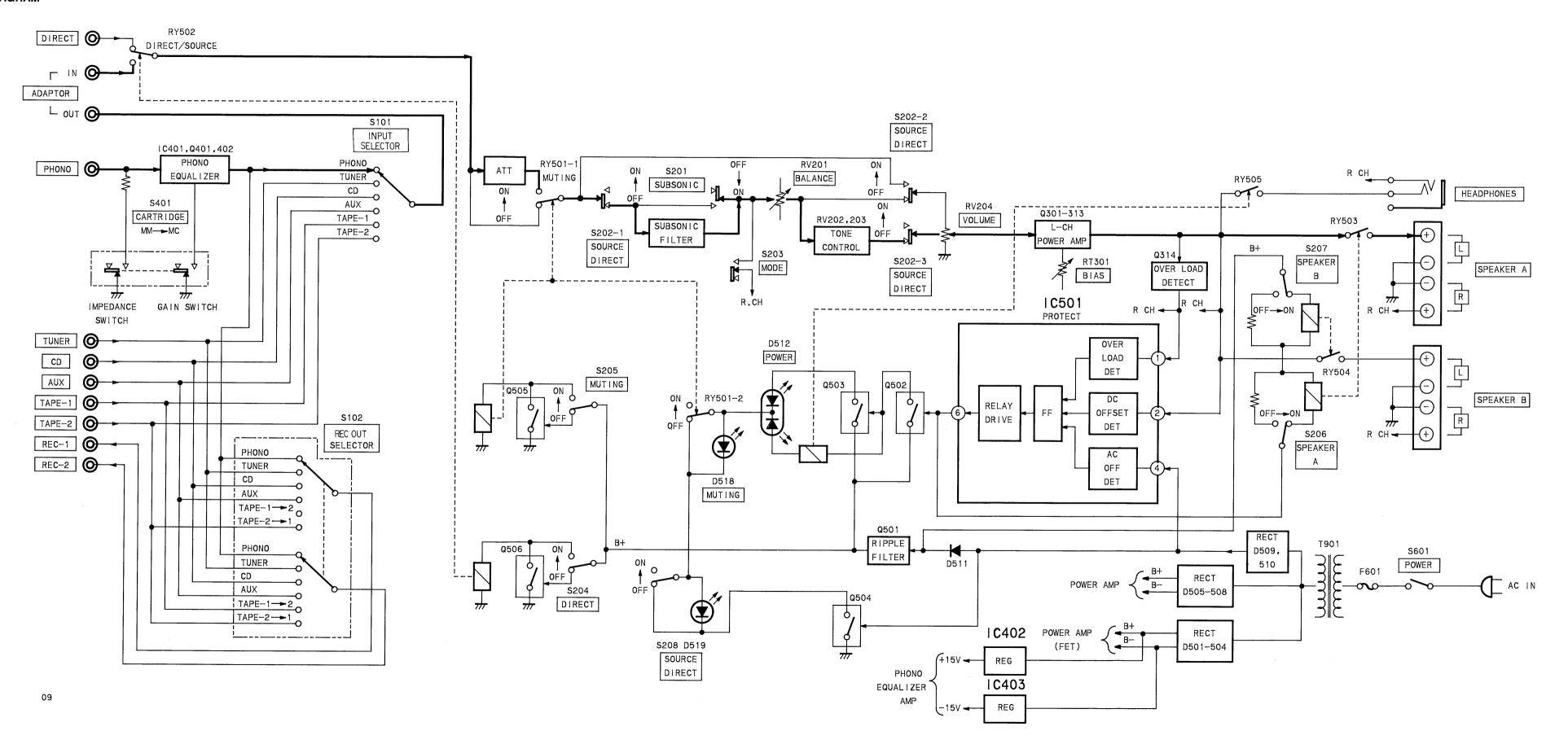


## **SECTION 3 DIAGRAMS**

### 3-1. CIRCUIT BOARDS LOCATION



#### 3-2. BLOCK DIAGRAM



#### 3-3. PRINTED WIRING BOARD

• See page 5 for Circuit Boards Location and see page 16 for Semiconductor Lead Layouts.

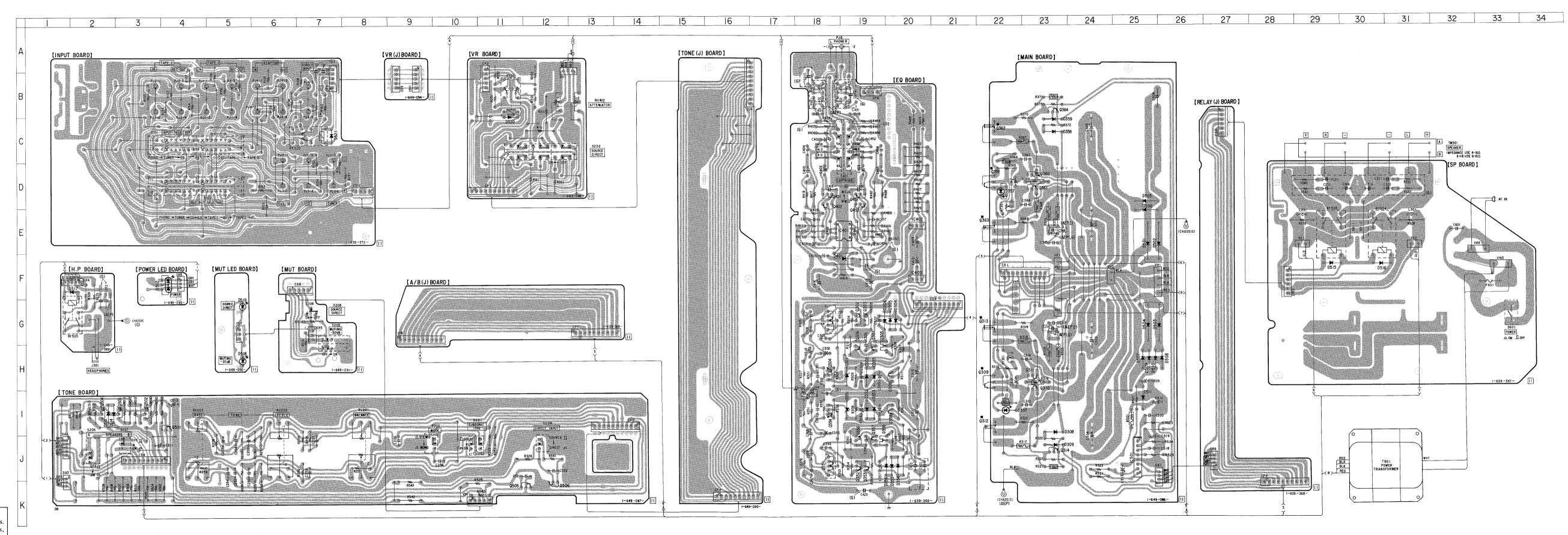
#### Semiconductor Location

Location	Ref. No.	Location	Ref. No.
D301	H-19	Q302	G-19
D302	H-19	Q303	G-19
D303 D304	H-19 G-20	Q304 Q305	H-18 H-19
D304	G-20	Q305 Q306	H-19
D306	G-19	Q307	H-19
D307	I-22	Q308	H-20
D308	I-23	Q309	H-22
D309	J-23	Q310	H-23
D351 D352	I-19 I-19	Q311 Q312	H-23 I-22
D352	I-19	0313	G-22
D354	J-20	Q314	J-23
D355	J-20	Q351	J-18
D356	J-19	Q352	J-19
D357	C-22	Q353	J-19
D358 D359	C-23 C-23	Q354 Q355	J-18 J-19
D401	F-19	Q356	J-19
D501	E-25	Q357	D-22
D502	E-25	Q358	1-20
D503	G-25	Q359	D-22
D504 D505	G-25 D-25	Q360 Q361	D-23 D-23
D506	E-25	Q362	C-22
D507	H-25	Q363	E-22
D508	H-26	Q364	B-23
D509	H-25	Q401	D-18
D510	H-25	Q402	D-18
D511 D512	I-25 F-3	Q451 Q452	D-19 D-19
D512	1.2	Q501	1-4
D514	1-2	Q502	1-3
D515	F-29	Q503	I-3
D516	F-30	Q504	I-2
D517	F-2	Q505	K-11 K-12
D518 D519	H-5 G-5	Q506	V-1∠
D520	C-11		
D521	C-7		
10401	F 10		
IC401 IC402	E-19 E-20		
IC402	F-20		
IC501	J-25		
Q301	G-18		
, <u> </u>		1	1

- o— : parts extracted from the components side.
  parts mounted on the conductor side.
- pattern on the side which is seen.
- G : German model

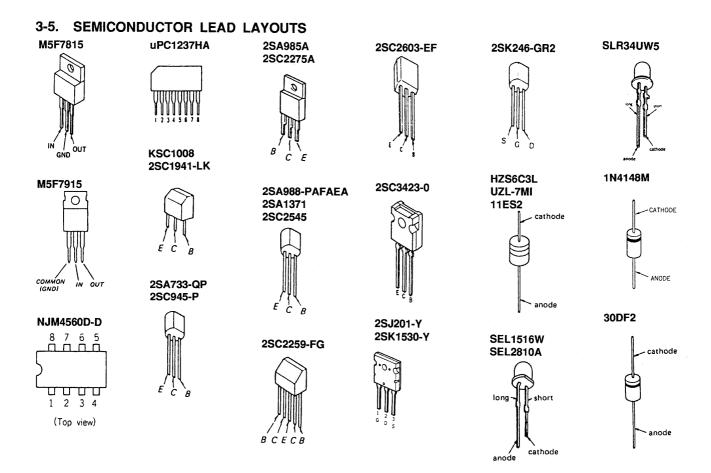
There are two typed of AEP models which are depend on countries.
AE2 (AEP2) model: Model for Scandinavian countries, Switzerland, Spain, and Portugal.

AE1 (AEP1) model: Model for other European countries.



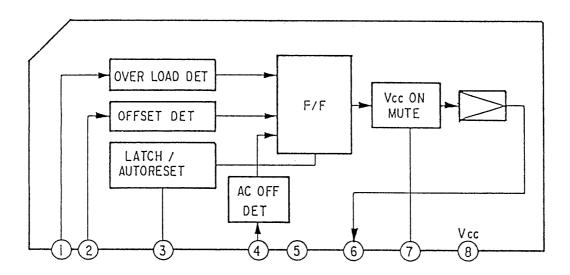
#### · See page 16 for IC Block Diagram. 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 2 Note: [H.P BOARD(1/2)] [INPUT BOARD] [VR BOARD] [EQ BOARD(1/3)] [MAIN BOARD] • All capacitors are in μF unless otherwise noted, pF:μμF CLASS-A AMP 50WV or less are not indicated except for electrolytics and Q310,311 DURINGTON 0312.313 0314 PROTECTION SOURCE DIRECT tantalums. CURRENT MIRROR Q307 CASCADE PJ 4 - 5 R201 6.2k R110 100 1/2W • All resistors are in $\Omega$ and 1/4W or less unless otherwise DIRECT INPUT specified. OFF --- ON PJ4-I • % : indicates tolerance. R-CH **▼** B+ · Components for right channel have same values as for left ADAPTOR 0310 2502275 channel. Reference numbers are coded from 150, 250, 350, P.14 -3 • m : nonflammable resistor. • fusible resistor. [SP BOARD (1/3)] • \_\_\_\_\_: panel designation. **→** → → PJ3-5 PHONO TUNER CĐ AUX RY50I INPUT SELECTOR TUNER Note: The components identified by mark △ or dotted line with mark $\triangle$ are critical for safety. R332 | \$10 1/2 | (G) | C320 | | 77 0.022 | PJ3-3 R328 IQ I/2W Replace only with part number specified. CĐ DAT / TAPE 1 B+ : B+ Line P.13-1 BASS E • B- : B- Line AUX R-CH D307 SEL22IOW • adjustment for repair. SPEAKER · Voltage are dc with respect to ground under on-signal TAPE 1 IN IMPEDANCE USE 4-16Ω A+B USE 8-16Ω conditions. S203 MODE REC OUT SELECTOR Voltages are taken with a VOM (Input Impedance 10MΩ). (AEP1,G) 1/2W 620 100 #/50V TAPE 2 IN R326 100k I/2W (AEP2) Voltage variations may be noted due to normal production W C423 T 0.015 7 200V STERFO - MONO Q304 47P(AEP ONST CURR 100P (G) TAPE 1 →2 47p(AEP) tolerances. C317 #7 3.3p 500V (AEP) 5.1p 500V(G) IC501 PJ1-3 B-· Signal path. TAPE I REC OUT ⇒: PHONO R-CH B+ B-• G : German model RIPPLE FILTER B+ D501-504 D509,51 30DF-2 IIE2 Note: 2SC945 50.7 There are two typed of AEP models which are depend on countries. AE2 (AEP2) model: Model for Scandinavian countries, 1.1 TAPE 2 REC OUT R107 H.P BOARD Switzerland, Spain, and Portugal. R543 2.7k ≸1/2W (1/2) AE1 (AEP1) model: Model for other European countries. R512 ≸ R510 . POWER LED [MUT BOARD] BOARD C502 + (1/2) 12000 63V 千 S 205-MUTING -20dB 1.1 B+ 0 \( \bigcup\_{0.01} \) C508 2.2 160V 0505 2SC2603 0.8 R540 4.7k 1.1 R520 4,7k D518 SEL2810A MUTING -20dB MUTING -20 dB 1C402 +15V REG SP BOARD -0.2R416 560k R417 62k i % I/2 W S207 SPEAKERS B 0505,506 D519 SEL2810A 14.9 IC402 TA7815S [SP BOARD (1/3)] MUT BOARD B+ T901 POWER TRANSFORMER SOURCE DIRECT R425 R423 2.4k 1.2k 1/2W 1/2W ON R506 (1/2)C404 0.056 1.0001 0.001/400V C405 0.016 Н DIRECT INPUT DIRECT [MUT LED BOARD] 0 C522 R508 3k 1/2W мс ← мм 25C2603 WW 0.8 R541 4.7k D513,514 IN4148M R509 3k 1/2W AC IN | R517 | R518 | ≥ 2.4 k | ≥ 2.4 k | 1/2 W | 1/2 W IC401 S 206 S PEAKERS A 2SD774 C504 5600 Q401,402 EQ PRE AMP R503 3k I/2W ON A 3 IC403 TA7915S R426 R428 2.4k I/2W I.2k I/2W R504 3k 1/2W В-R505 3k 1/2W R427 390 1/2W R429 1.2k 1/2W D505-508 IC403 B+ В-[EQ BOARD(1/3)] [TONE BOARD] [EQ BOARD (1/3)]

3-4. SCHEMATIC DIAGRAM



#### 3-6. IC BLOCK DIAGRAM

#### • IC501 uPC1237HA



# SECTION 4 EXPLODED VIEWS

#### NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

4-1. FRONT PANEL SECTION

- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.
- G: German model

The components identified by mark

\( \bullet \) or dotted line with mark

\( \bullet \) are

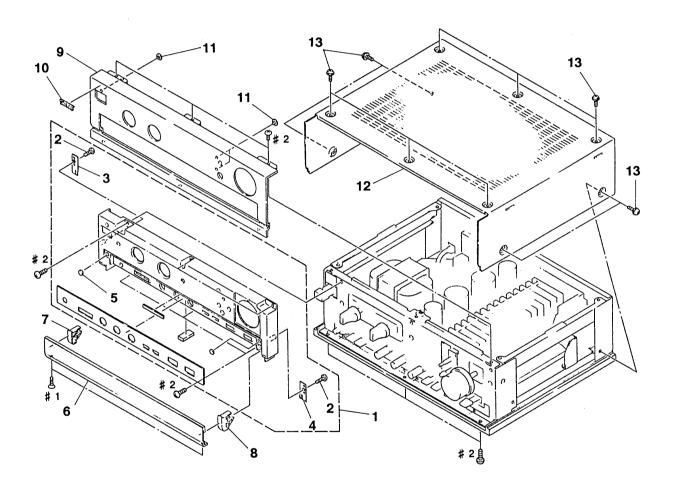
critical for safety.

Replace only with part number specified.

#### Note:

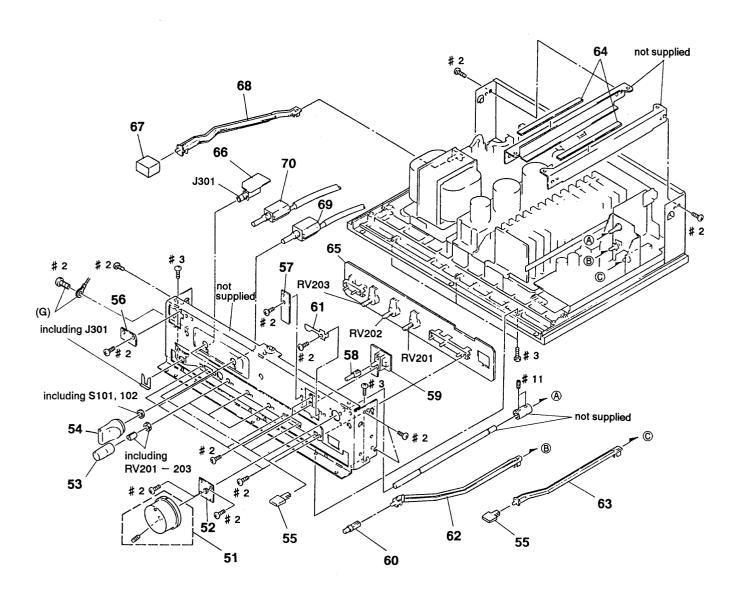
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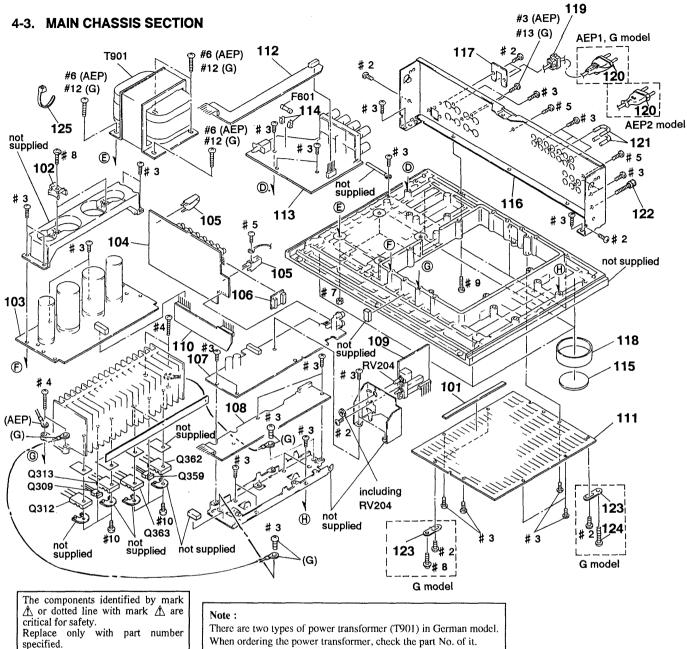


Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1 2 * 3 * 4	4-951-620-01 4-942-233-01	PANEL (BASE) ASSY SCREW (2.6X8), +BVTP SPRING (L), PLATE SPRING (R), PLATE		8 9 10		ARM (R) PANEL, FRONT EMBLEM (NO. 5), SONY	
5	4-879-274-01			11 * 12	4-931-646-01	LENS, LED CASE (AEP1, G)	
6 7	4-955-303-21 4-942-225-01			* 12 13	4-946-347-11		

#### 4-2. SUB CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51 52 53 54 55	4-946-333-01	BRACKET (BEARING) KNOB (TONE) KNOB (DIA. 25)		62 63 * 64 * 65		ROD (C) DAMPER TONE BOARD, COMPLETE (AEP1, G)	
* 56 * 57 58 * 59 60	1-649-092-11 4-931-641-01 1-649-091-11 4-931-926-01			* 65 * 66 67 68 69 70	1-649-089-11 4-942-032-01 4-946-340-01 1-572-742-11	KNOB (POWER) ROD (P)	



When ordering the power transformer, check the part No. of it.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 101 102 * 103 * 103 * 103	A-4360-851-A A-4360-865-A	DAMPER RETAINER, ELECT CAP MAIN BOARD, COMPLETE (AEP1) MAIN BOARD, COMPLETE (AEP2) MAIN BOARD, COMPLETE (G)		* 117 118 * 119 <u>120</u> 120	4-923-882-02 3-703-244-00 1-574-805-11	BRACKET, CORD STOPPER RING(LARGE-16), ORNAMENTAL, FOOT BUSHING (2104), CORD CORD, POWER (AEP2) CORD, POWER (AEP1, G)	
* 104 * 105 * 106 * 107 * 107	1-649-094-11 A-4360-860-A	INPUT BOARD BRACKET (GROUND) VR (J) BOARD EQ BOARD, COMPLETE (AEP) EQ BOARD, COMPLETE (G)		121 122 * 123 124 125	4-947-010-01 4-941-988-01 4-921-437-01	PLUG, JUMPER SCREW, FEEDER FIXED BRACKET (GROUND) (G) SCREW (M3X20), TAPPING (G) BAND (TAITON), BINDING	
* 108 * 109 * 110 * 111 * 112	1-649-088-11 1-639-369-11 4-916-732-01	TONE (J) BOARD VR BOARD A/B (J) BOARD BOARD, BOTTOM RELAY (J) BOARD		↑F601 Q309 Q312 Q313 Q359	8-729-203-45 8-729-015-30 8-729-015-31	FUSE, TIME-LAG 4A TRANSISTOR 2SC3423-0 TRANSISTOR 2SK1530-Y TRANSISTOR 2SJ201-Y TRANSISTOR 2SC3423-0	
* 113 114 * 115 * 116 * 116	4-923-850-01 4-944-612-01	SP BOARD HOLDER, FUSE FOOT (DIA. 46) PANEL, BACK (AEP1, G) PANEL, BACK (AEP2)			8-729-015-31 1-423-682-11	TRANSISTOR 2SK1530-Y TRANSISTOR 2SJ201-Y TRANSFORMER, POWER TRANSFORMER, POWER	

### A/B (J) EQ

# SECTION 5 ELECTRICAL PARTS LIST

#### NOTE:

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.

Replace only with part number specified.

When indicating parts by reference number, please include the board name. RESISTORS
 All resistors are in ohms
 METAL: Metal-film resistor
 METAL OXIDE: Metal Oxide-film resistor
 F: nonflammable

- CAPACITORS uF : μF
- COILS uH : μH

### • SEMICONDUCTORS

In each case, u:  $\mu$ , for example: uA...:  $\mu$  A..., uPA...:  $\mu$  PA..., uPB...:  $\mu$  PB..., uPC...:  $\mu$  PD...:  $\mu$  PD...

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
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There are two type of AEP models which are depend on countries.

AE2 (AEP2) model: Model for Scandinavian countries. Switzerland, Spain and Portugal

AE1 (AEP1) model: Model for other European countries Ref. No. Description Remark Ref. No. Part No. Description Remark Part No. 1-110-335-11 MYLAR 100PF 50V (G) 1-639-369-11 A/B (J) BOARD C401 5% \*\*\*\*\*\*\* C401 1-110-341-11 MYLAR 330PF 5% 50V (AEP) < CONNECTOR > 1-123-369-00 ELECT 4. 7uF 20% 50V C402 C403 1-124-998-81 ELECT 1000uF 20% 10V \* CP7 1-568-202-11 PIN, CONNECTOR (PC BOARD) 10P C404 1-136-162-00 FILM 0.056uF 5% 50V 1-568-202-11 PIN, CONNECTOR (PC BOARD) 10P C405 1-137-471-11 FILM 0.016uF 5% 50V \* CP8 20% \*\*\*\*\*\*\*\*\*\*\*\*\* C406 1-124-122-11 ELECT 100uF 50V C407 1-130-470-00 MYLAR 820PF 5% 50V (AEP) A-4360-860-A EQ BOARD, COMPLETE (AEP) 1-130-479-00 MYLAR 0.0047uF 50V (G) C407 5% 1-126-059-11 ELECT 10nF 20% \*\*\*\*\*\*\*\* C408 50V C409 1-124-122-11 ELECT 100uF 20% 50V A-4360-870-A EQ BOARD, COMPLETE (G) 20% \*\*\*\*\*\*\* C410 1-124-122-11 ELECT 100uF 50V 1-124-913-11 ELECT 470uF 50V C413 20% < CAPACITOR > 1-124-913-11 ELECT 470nF 20% 50V C414 1-162-284-31 CERAMIC 150PF 10% 50V (G) C415 100PF 1-162-282-31 CERAMIC 100PF 50V (G) C301 1-110-335-11 MYLAR 5% 50V C416 10% C302 1-123-369-00 ELECT 4. 7uF 20% 50V C303 1-110-339-11 MYLAR 220PF 5% 50V C420 1-161-379-00 CERAMIC 0.01uF 20% 25V (G) 100uF 1-161-379-00 CERAMIC 0.01uF 20% 25V (G) C304 1-124-122-11 ELECT 20% 50V C421 1-124-122-11 ELECT 1-106-367-00 MYLAR 0.01uF 200V (G) C305 100uF 20% 50V C422 5% 1-106-367-00 MYLAR C423 0.01uF 5% 200V (G) C306 1-107-159-00 MICA 33PF 500V (G) 1-162-282-31 CERAMIC 100PF 10% 50V (G) 5% C425 C306 1-107-210-00 MICA 22PF 5% 500V (AEP) C307 1-124-910-11 ELECT 47uF 20% 50V C426 1-136-165-00 FILM 0. 1uF 5% 50V C308 1-101-880-00 CERAMIC 47PF 5% 50V (AEP) C427 1-136-165-00 FILM 0. 1uF 5% 50V C308 1-110-335-11 MYLAR 100PF 5% 50V (G) C451 1-110-335-11 MYLAR 100PF 5% 50V (G) 1-110-341-11 MYLAR 330PF 5% 50V (AEP) C451 C309 1-130-483-00 MYLAR 0.01uF 5% 50V (G) C452 1-123-369-00 ELECT 4. 7uF 20% 50V C310 1-126-066-11 ELECT 470uF 20% 63V 1000uF 1-126-066-11 ELECT 470uF C453 1-124-998-81 ELECT 20% 10V C311 20% 63V 1-107-026-00 MICA 500V (G) C454 1-136-162-00 FILM 0.056uF 5% 50V C317 5. 1PF 1-107-044-00 MICA 3. 3PF 500V (AEP) 1-137-471-11 FILM 0.016uF 5% 50**V** C317 C455 C457 1-130-470-00 MYLAR 820PF 5% 50V (AEP) 50V (G) C318 1-126-052-11 ELECT 100uF 20% **50V** C457 1-130-479-00 MYLAR 0.0047uF 5% C351 1-110-335-11 MYLAR 100PF 5% **50V** 4.7uF 20% **50V** 20% C352 1-123-369-00 ELECT C458 1-126-059-11 ELECT 10uF 50V 1-110-339-11 MYLAR 50V (G) 220PF 5% 50V C465 1-162-284-31 CERAMIC 150PF 10% C353 1-124-122-11 ELECT 100uF 20% C466 1-162-282-31 CERAMIC 100PF C354 50V 50V (G) C355 1-124-122-11 ELECT 100uF 20% 50V < CONNECTOR > 1-107-159-00 MICA 33PF 500V (G) C356 5% C356 1-107-210-00 MICA 22PF 5% 500V (AEP) CP6 1-560-941-00 PIN, CONNECTOR 4P C357 1-124-910-11 ELECT 47uF 20% 50V 1-101-880-00 CERAMIC (AEP) < SOCKET > C358 47PF 5% 50V C358 1-110-335-11 MYLAR 100PF 50V (G) \* CS9 1-562-334-00 SOCKET, CONNECTOR 10P 5% C367 1-107-026-00 MICA 5. 1PF 500V (G) 1-107-044-00 MICA 3. 3PF 500V (AEP) C367 C368 1-126-052-11 ELECT 100uF 20% 50V



Color   Colo	Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description				Remark
Q402   8-719-935-41 DIODE   BZSGGSL   Q452   8-729-954-52 TRANSISTOR   25C2545     D302   8-719-987-85 DIODE   IN4148M   Q452   8-729-954-52 TRANSISTOR   25C2545     D303   8-719-987-85 DIODE   IN4148M   Q452   8-729-954-52 TRANSISTOR   25C2545     D304   8-719-987-85 DIODE   IN4148M   R301   1-247-713-11 CARDON   IN   S   1/4F   F     D305   8-719-987-85 DIODE   IN4148M   R302   1-249-498-11 CARDON   IN   S   1/4F   F     D305   8-719-987-85 DIODE   IN4148M   R302   1-249-498-11 CARDON   IN   S   1/4F   F     D305   8-719-987-85 DIODE   IN4148M   R303   1-247-719-11 CARDON   IN   S   1/4F   F     D305   8-719-987-85 DIODE   IN4148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D305   8-719-987-85 DIODE   IN4148M   R301   1-249-490-11 CARDON   2.02   S   1/4F   F     D305   8-719-987-85 DIODE   IN4148M   R301   1-247-719-11 CARDON   2.02   S   1/4F   F     D401   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D402   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D403   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D404   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D405   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D406   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D406   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D407   B-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D408   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D409   8-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D409   B-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D409   B-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02   S   1/4F   F     D409   B-719-900-94 DIODE   IN2148M   R303   1-247-719-11 CARDON   2.02	101.110.	14101101	<u> </u>		HOMGI IX	10111101	1410 1101	<u>Debel Iption</u>				TOMOS II
Description   Section			< DIODE >			Q401	8-729-354-52	TRANSISTOR	2SC2545			
DOI: 0.00   R-719-987-4.5   DIORE   IN4148M   DOI: 0.00   R-719-987-6.5   DIORE   IN4148M   DOI: 0.00   R-719-987-6.5   DIORE   IN4148M   R302   1-247-713-11 CARBON   IN5						Q402						
Day 08	D301	8-719-933-41	DIODE HZS6	C3L		Q451						
D306   8-719-987-63 DIOLOG						Q452	8-729-354-52	TRANSISTOR	2SC2545			
BASIS   1-247-713-11 CARBON   IX   5%   1/4V   F												
R301   1-247-713-11 CARRON   11K   5% 1/4%   F								< RESISTOR	>			
D805   8-719-987-85 D100E	D305	8-719-987-63	DIODE IN41	48M		D201	1 047 710 11	CADDON	117	<b>-ω</b>	1 / 410	D.
B351   8-719-933-4 DIODE   HZSECZL   B303   1-247-704-11 CARBON   220   5%   1/4"   F	Dane	0 710 007 69	DIODE INAI	10M		1						r
D352   8-719-887-63 D100D						1						
D353   8-719-887-63 D100E											-	F
B306   1-247-717-11   CARBON   2.28   5%   1/4V   F						_						
B306   1-247-717-11   CARRON   2.21   5%   1/4V   F   1/249-897-16   D100E   IN1418W   B307   1-249-490-11   CARRON   220   5%   1/4V   F   1						<u>/:\</u> ito05	1 212 000 00	TOOTBEE	220	070	1/ 11	•
D355   8-719-987-63 DIODE   IN1148M   R307   1-249-490-11 CARBON   ZTK   5%   1/4W	5001	0 110 001 00	21022 21112	2011		R306	1-247-717-11	CARBON	2. 2K	5%	1/4W	F
D356   8-719-887-63 DIODE   IN148M   B308   1-247-721-11 CARBON   220   5%   1/4F   F	D355	8-719-987-63	DIODE 1N41	48M								
AR310   1-212-881-11 FUSIBLE   100   5%   1/4W   F						R308			220	5%		
* EH2	D401	8-719-000-84	DIODE UZL-	7M1		R309	1-247-721-11	CARBON	4.7K	5%	1/4W	
### EH2						<u></u> <b>1 1 1 1 1 1 1 1 1 1</b>	1-212-881-11	FUSIBLE	100	5%	1/4W	F
RB22			< PLUG >									
R321   1-249-668-11   CARBON   620   5%   1/4W   F												F
C   C   R351   -247-713-11   CARBON   1K   5%   1/4W   F   R352   1-249-469-11   CARBON   100K   5%   1/4W   F   R353   1-247-704-11   CARBON   220   5%   1/4W   F   R353   1-247-704-11   CARBON   220   5%   1/4W   F   R353   1-247-800   F   F   R353   1-247-800   F   F   R353   1-247-800   F   F   F   F   R353   1-247-800   F   F   F   F   F   F   F   F   F	* EH2	1-564-506-11	PLUG, CONNEC	TOR 3P								
R352   1-249-469-11 CARBON   100K   5%   1/4\frac{1}{4}						1						_
TCA01			< IC >			1						F
Time	70101	0.750.745.61	10 11114500	D D		R352	1-249-469-11	CARBON	100K	5%	1/4W	
CAUSTON   1-242-887   C   MSF7915						D3E3	1_247_704_11	CADRON	220	<b>5%</b>	1 //\	
AR355   1-212-889-00 FISIBLE   220   5%   1/4W   F						1					-	r.
COIL   R356   1-247-717-11   CARBON   2. 2K   5%   1/4W   F   R357   1-249-490-11   CARBON   27K   5%   1/2W	10403	0-100-240-01	10 10111313									
R357   1-249-490-11 CARBON   27K   5%   1/2\frac{1}{2}\frac{1}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}\frac{1}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}			< mil. >									
1.401			( 0012 /			1						•
L451   1-424-397-11   COIL, CHOKE   200uh (G)   R359   1-247-721-11   CARBON   4.7K   5%   1/4W   F   L452   1-424-397-11   COIL, CHOKE   200uh (G)   R360   1-212-881-11   FUSIBLE   100   5%   1/4W   F   L47861   1-212-881-11   FUSIBLE   100   5%   1/4W   F   R376   1-249-721-11   CARBON   100K   5%   1/2W   F   R376   1-249-721-11   CARBON   100K   5%   1/2W   R405   1-247-706-11   CARBON   330   5%   1/4W   F   CARBON   1/4W   CARBON	L401	1-424-397-11	COIL, CHOKE	200uH (G)							-,	
L452   1-424-397-11 COIL, CHOKE   200uh (G)   AR360   1-212-881-11 FUSIBLE   100   5%   1/4W   F	L402			200uH (G)		R358	1-247-704-11	CARBON	220	5%	1/4W	
AR361   1-212-881-11   FUSIBLE   100   5%   1/4W   F   R376   1-249-721-11   CARBON   100K   5%   1/2W   R405   1-249-721-11   CARBON   330   5%   1/4W   F   F   F   F   F   F   F   F   F	L451	1-424-397-11	COIL, CHOKE	200uH (G)		R359	1-247-721-11	CARBON	4.7K	5%	1/4W	
R376   1-249-721-11 CARBON   100K   5%   1/2W	L452	1-424-397-11	COIL, CHOKE	200uH (G)		<u>1</u> 1. R360	1-212-881-11	FUSIBLE	100	5%	1/4W	F
PJ6 1-580-054-11 JACK, PIN 2P						_						F
R405   1-247-706-11   CARBON   330   5%   1/4\frac{1}{			< JACK >			R376	1-249-721-11	CARBON	100K	5%	1/2₩	
R405   1-247-706-11   CARBON   330   5%   1/4\frac{1}{	DIC	1 500 057 11	TACK DIN OD			D277	1 040 000 11	CADDON	620	F0/	1 /OW	
R406   1-247-700-11 CARBON   100   5%   1/4W	LJO	1-560-054-11	JACK, FIN 2F								-	E (VED)
R407   1-249-469-11   CARBON   100K   5%   1/4W			< TRANSISTOR	>		l						r (ALI)
Q301 8-729-620-17 TRANSISTOR 2SC2259-FG Q302 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q303 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q304 8-729-142-01 TRANSISTOR 2SC1941-LK Q305 8-729-201-56 TRANSISTOR 2SC2941-LK Q306 8-729-10-56 TRANSISTOR 2SC2941-LK Q307 8-729-803-76 TRANSISTOR 2SC1941-LK Q308 8-729-142-01 TRANSISTOR 2SC1941-LK Q309 8-729-142-01 TRANSISTOR 2SC1941-LK Q309 8-729-140-82 TRANSISTOR 2SC1941-LK Q300 8-729-140-82 TRANSISTOR 2SC2898-PAFAEA Q300 8-729-140-82 TRANSISTOR 2SC2898-			· 110110101010	,								
Q302 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q303 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q304 8-729-142-01 TRANSISTOR 2SC1941-LK Q305 8-729-201-56 TRANSISTOR 2SK246-GR2 Q306 8-729-201-56 TRANSISTOR 2SA988-PAFAEA Q307 8-729-803-76 TRANSISTOR 2SC1941-LK Q308 8-729-142-01 TRANSISTOR 2SC1941-LK Q308 8-729-142-01 TRANSISTOR 2SC1941-LK Q309 8-729-140-82 TRANSISTOR 2SC1941-LK Q309 8-729-140-82 TRANSISTOR 2SC1941-LK Q309 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q309 R415 1-247-700-11 CARBON 100 5% 1/4W Q309 R416 1-214-958-00 METAL 560K 1% 1/4W Q309 R417 1-249-845-91 CARBON 62K 1% 1/2W Q309 R418 1-249-818-11 CARBON 4. 7K 1% 1/2W Q309 R418 1-249-818-11 CARBON 1 1K 5% 1/4W F Q309 R419 1-247-713-11 CARBON 2. 2K 5% 1/4W F Q309 R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F Q309 R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F Q309 R420 1-249-421-11 CARBON 1. 2K 5% 1/2W Q309 R420 1-249-421-11 CARBON 1. 2K 5% 1/2W Q309 R420 1-249-421-11 CARBON 1. 2K 5% 1/2W Q309 R420 1-247-753-11 CARBON 1. 2K 5% 1/2W	Q301	8-729-620-17	TRANSISTOR	2SC2259-FG				-				
Q303   8-729-140-82   TRANSISTOR   2SA988-PAFAEA   R409   1-247-710-11   CARBON   560   5%   1/4W     Q304   8-729-142-01   TRANSISTOR   2SC1941-LK   R410   1-247-710-11   CARBON   560   5%   1/4W     Q305   8-729-201-56   TRANSISTOR   2SK246-GR2   R411   1-247-725-11   CARBON   10K   5%   1/4W     Q306   8-729-140-82   TRANSISTOR   2SA988-PAFAEA   R413   1-249-529-11   CARBON   10   5%   1/4W     Q307   8-729-803-76   TRANSISTOR   2SA1371     Q308   8-729-142-01   TRANSISTOR   2SC1941-LK   R414   1-247-138-00   CARBON   2K   5%   1/4W     Q352   8-729-140-82   TRANSISTOR   2SA988-PAFAEA   R415   1-247-700-11   CARBON   100   5%   1/4W     Q353   8-729-140-82   TRANSISTOR   2SA988-PAFAEA   R416   1-214-958-00   METAL   560K   1%   1/2W     Q353   8-729-140-82   TRANSISTOR   2SA988-PAFAEA   R418   1-249-818-11   CARBON   4. 7K   1%   1/2W     Q354   8-729-142-01   TRANSISTOR   2SC1941-LK   R418   1-249-818-11   CARBON   4. 7K   1%   1/2W     Q355   8-729-201-56   TRANSISTOR   2SA988-PAFAEA   R419   1-247-713-11   CARBON   4. 7K   1%   1/2W     Q356   8-729-140-82   TRANSISTOR   2SA988-PAFAEA   R420   1-249-421-11   CARBON   2. 2K   5%   1/4W   F   (G)     Q357   8-729-803-76   TRANSISTOR   2SA988-PAFAEA   R420   1-249-421-11   CARBON   2. 2K   5%   1/4W   F   (G)     Q358   8-729-142-01   TRANSISTOR   2SA1371   R421   1-249-421-11   CARBON   2. 2K   5%   1/4W   F   (G)     Q358   8-729-142-01   TRANSISTOR   2SC1941-LK   R423   1-247-753-11   CARBON   1. 2K   5%   1/2W     Q358   8-729-142-01   TRANSISTOR   2SC1941-LK   R423   1-247-753-11   CARBON   1. 2K   5%   1/2W     Q358   8-729-142-01   TRANSISTOR   2SC1941-LK   R423   1-247-753-11   CARBON   1. 2K   5%   1/2W     Q358   8-729-142-01   TRANSISTOR   2SC1941-LK   R423   1-247-753-11   CARBON   1. 2K   5%   1/2W     Q358   8-729-142-01   TRANSISTOR   2SC1941-LK   R423   1-247-753-11   CARBON   1. 2K   5%   1/2W     Q358   8-729-142-01   TRANSISTOR   2SC1941-LK   R423   1-247-753-11   CARBON   1. 2K   5%   1/2W     Q358   8-729-142-01   TRANSISTOR   2SC1941-	•						100 11		20011		_/ _!!	
Q304 8-729-142-01 TRANSISTOR 2SC1941-LK R410 1-247-710-11 CARBON 560 5% 1/4W R412 1-249-529-11 CARBON 10K 5% 1/4W R412 1-249-529-11 CARBON 110 5% 1/4W R412 1-249-529-11 CARBON 10 5% 1/4W R413 1-249-504-11 CARBON 10 5% 1/4W R415 1-247-700-11 CARBON 100 5% 1/4W R415 1-247-700-11 CARBON 100 5% 1/4W R415 1-247-700-11 CARBON 100 5% 1/4W R417 1-249-845-91 CARBON 62K 1% 1/2W R418 1-249-818-11 CARBON 4.7K 1% 1/2W R418 1-249-818-11 CARBON 1						R409	1-247-710-11	CARBON	560	5%	1/4W	
Q306 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R413 1-249-529-11 CARBON 10 5% 1/4W Q307 8-729-803-76 TRANSISTOR 2SA1371  Q308 8-729-142-01 TRANSISTOR 2SC1941-LK R414 1-247-138-00 CARBON 2K 5% 1/4W Q351 8-729-620-17 TRANSISTOR 2SC2259-FG R415 1-247-700-11 CARBON 100 5% 1/4W Q352 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R416 1-214-958-00 METAL 560K 1% 1/4W R417 1-249-845-91 CARBON 62K 1% 1/2W R417 1-249-845-91 CARBON 62K 1% 1/2W Q354 8-729-140-82 TRANSISTOR 2SC1941-LK Q355 8-729-140-82 TRANSISTOR 2SC1941-LK Q356 8-729-140-82 TRANSISTOR 2SC1941-LK Q357 8-729-803-76 TRANSISTOR 2SA988-PAFAEA R419 1-247-713-11 CARBON 1K 5% 1/4W F (G) Q357 8-729-803-76 TRANSISTOR 2SA988-PAFAEA R420 1-249-421-11 CARBON 2.2K 5% 1/4W F (G) R421 1-249-421-11 CARBON 1.2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R421 1-249-421-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R421 1-249-421-11 CARBON 1.2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1.2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC19		8-729-142-01	TRANSISTOR	2SC1941-LK		R410	1-247-710-11	CARBON	560		1/4W	
Q306 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q307 8-729-803-76 TRANSISTOR 2SA1371  Q308 8-729-142-01 TRANSISTOR 2SC1941-LK Q351 8-729-620-17 TRANSISTOR 2SC2259-FG Q352 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q353 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q354 8-729-142-01 TRANSISTOR 2SA988-PAFAEA Q355 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q356 8-729-140-82 TRANSISTOR 2SC1941-LK Q357 8-729-803-76 TRANSISTOR 2SA988-PAFAEA Q358 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q359 8-729-140-82 TRANSISTOR 2SC1941-LK Q350 8-729-140-82 TRANSISTOR 2SC1941-LK Q351 8-729-140-82 TRANSISTOR 2SC1941-LK Q352 8-729-140-82 TRANSISTOR 2SC1941-LK Q353 8-729-140-82 TRANSISTOR 2SC1941-LK Q354 8-729-140-82 TRANSISTOR 2SC1941-LK Q355 8-729-140-82 TRANSISTOR 2SC1941-LK Q356 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q357 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q358 8-729-142-01 TRANSISTOR 2SC1941-LK Q358 8-729-142-01 TRA	Q305	8-729-201-56	TRANSISTOR	2SK246-GR2		R411	1-247-725-11	CARBON	10K	5%	1/4W	
Q307 8-729-803-76 TRANSISTOR 2SA1371 Q308 8-729-142-01 TRANSISTOR 2SC1941-LK Q351 8-729-620-17 TRANSISTOR 2SC259-FG Q352 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q353 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q354 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q355 8-729-201-56 TRANSISTOR 2SC1941-LK Q356 8-729-201-56 TRANSISTOR 2SC46-GR2 Q357 8-729-803-76 TRANSISTOR 2SA988-PAFAEA Q358 8-729-140-82 TRANSISTOR 2SA988-PAFAEA Q359 8-729-140-82 TRANSISTOR 2SC1941-LK Q350 8-729-140-82 TRANSISTOR 2SC1941-LK Q351 8-729-140-82 TRANSISTOR 2SC1941-LK Q352 R419 1-247-713-11 CARBON Q353 R5-729-140-82 TRANSISTOR 2SA988-PAFAEA Q356 R5-729-140-82 TRANSISTOR 2SA988-PAFAEA Q357 R5-729-803-76 TRANSISTOR 2SA988-PAFAEA Q358 R5-729-140-82 TRANSISTOR 2SA1371 Q358 R5-729-142-01 TRANSISTOR 2SA1371 Q358 R5-729-142-01 TRANSISTOR 2SC1941-LK Q359 R5-729-142-01 TRANSISTOR 2SC1941-LK Q350 R421 1-249-421-11 CARBON Q350 R422 1-247-753-11 CARBON Q350 R422 1-247-753-11 CARBON Q350 R423 1-247-753-11 CAR						R412	1-249-529-11	CARBON	110	5%	1/4₩	
Q308 8-729-142-01 TRANSISTOR 2SC1941-LK R414 1-247-138-00 CARBON 2K 5% 1/4W Q351 8-729-620-17 TRANSISTOR 2SC259-FG R415 1-247-700-11 CARBON 100 5% 1/4W Q352 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R416 1-214-958-00 METAL 560K 1% 1/2W R417 1-249-845-91 CARBON 62K 1% 1/2W R417 1-249-845-91 CARBON 62K 1% 1/2W Q353 8-729-142-01 TRANSISTOR 2SA988-PAFAEA R418 1-249-818-11 CARBON 4.7K 1% 1/2W Q354 8-729-142-01 TRANSISTOR 2SC1941-LK Q355 8-729-201-56 TRANSISTOR 2SK246-GR2 R419 1-247-713-11 CARBON 1K 5% 1/4W F Q356 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) Q357 8-729-803-76 TRANSISTOR 2SA1371 R421 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W						R413	1-249-504-11	CARBON	10	5%	1/4W	
Q351 8-729-620-17 TRANSISTOR 2SC2259-FG R415 1-247-700-11 CARBON 100 5% 1/4W Q352 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R416 1-214-958-00 METAL 560K 1% 1/4W R417 1-249-845-91 CARBON 62K 1% 1/2W Q353 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R418 1-249-818-11 CARBON 4.7K 1% 1/2W Q354 8-729-142-01 TRANSISTOR 2SC1941-LK Q355 8-729-201-56 TRANSISTOR 2SK246-GR2 R419 1-247-713-11 CARBON 1K 5% 1/4W F Q356 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) Q357 8-729-803-76 TRANSISTOR 2SA1371 R421 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W												
Q352 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R416 1-214-958-00 METAL 560K 1% 1/4W R417 1-249-845-91 CARBON 62K 1% 1/2W R418 1-249-818-11 CARBON 4.7K 1% 1/2W R418 1-249-818-11 CARBON 1K 5% 1/4W F R419 1-247-713-11 CARBON 1K 5% 1/4W F R420 1-249-421-11 CARBON 1C 2K 5% 1/4W F R421 1-249-421-11 CARBON 1C 2K 5% 1/4W F R422 1-247-753-11 CARBON 1C 5% 1/2W R423 1-247-753-11 CARBON 1C 5% 1/2W R423 1-247-753-11 CARBON 1C 5% 1/2W												
Q353 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R418 1-249-818-11 CARBON 62K 1% 1/2W A254 8-729-142-01 TRANSISTOR 2SC1941-LK Q355 8-729-201-56 TRANSISTOR 2SK246-GR2 R419 1-247-713-11 CARBON 1K 5% 1/4W F Q356 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) Q357 8-729-803-76 TRANSISTOR 2SA1371 R421 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W												
Q353 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R418 1-249-818-11 CARBON 4.7K 1% 1/2W Q354 8-729-142-01 TRANSISTOR 2SC1941-LK Q355 8-729-201-56 TRANSISTOR 2SK246-GR2 R419 1-247-713-11 CARBON 1K 5% 1/4W F Q356 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) Q357 8-729-803-76 TRANSISTOR 2SA1371 R421 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W	Q352	8-729-140-82	TRANSISTOR	ZSA988-PAFAEA								
Q354 8-729-142-01 TRANSISTOR 2SC1941-LK Q355 8-729-201-56 TRANSISTOR 2SK246-GR2 R419 1-247-713-11 CARBON 1K 5% 1/4W F Q356 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) Q357 8-729-803-76 TRANSISTOR 2SA1371 R421 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W	0050	0 700 140 00	TD ANICT CTCD	OCIOOO DIBIE!								
Q355 8-729-201-56 TRANSISTOR 2SK246-GR2 R419 1-247-713-11 CARBON 1K 5% 1/4W F Q356 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) Q357 8-729-803-76 TRANSISTOR 2SA1371 R421 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W						K418	1-249-818-11	CARBON	4. 7K	1%	I/ZW	
Q356 8-729-140-82 TRANSISTOR 2SA988-PAFAEA R420 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) Q357 8-729-803-76 TRANSISTOR 2SA1371 R421 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W						D410	1_9/7_719 11	CADDOM	1 <i>V</i>	E0/	1 / AW	D
Q357 8-729-803-76 TRANSISTOR 2SA1371 R421 1-249-421-11 CARBON 2. 2K 5% 1/4W F (G) R422 1-247-753-11 CARBON 1. 2K 5% 1/2W Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W	-											
Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W R423 1-247-753-11 CARBON 1. 2K 5% 1/2W												
Q358 8-729-142-01 TRANSISTOR 2SC1941-LK R423 1-247-753-11 CARBON 1. 2K 5% 1/2W	MOD I	0-120-000-10	TUNIOTOTOM	DOMIO ( I								r (u)
	Q358	8-729-142-01	TRANSISTOR	2SC1941-LK								
	4000										-, - "	

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.

Replace only with part number specified.

### EQ HP INPUT

Ref. No.	Part No.	Description				Remark	Ref.	No.	Part No.	Description			Re	emark
R424 R425 R426 R427 R428	1-247-746-11 1-247-249-00 1-247-249-00 1-247-746-11 1-247-753-11	CARBON CARBON CARBON	390 2. 4K 2. 4K 390 1. 2K	5% 5%	1/2W 1/2W 1/2W 1/2W 1/2W				1-515-787-11	< RELAY > RELAY ************************************	*****	*****	*****	*****
R429 R455 R456 R457 R458	1-247-753-11 1-247-706-11 1-247-700-11 1-249-469-11 1-249-469-11	CARBON CARBON CARBON	1. 2K 330 100 100K 100K	5% 5% 5% 5% 5%	1/2W 1/4W 1/4W 1/4W 1/4W	F (AEP)	*		1-639-372-11 4-946-336-01	INPUT BOARD ********* BRACKET (GROUND	)			
R459 R460 R461 R462 R463	1-247-710-11 1-247-710-11 1-247-725-11 1-249-529-11 1-249-504-11	CARBON CARBON CARBON	560 560 10K 110	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		1	102 152	1-162-282-31 1-162-282-31		OPF OPF	10% 10%	50V (	
R465 R466 R467 R468	1-247-700-11 1-214-958-00 1-249-845-91 1-249-818-11	CARBON METAL CARBON CARBON	100 560K 62K 4.7K	5% 1% 1% 1%	1/4W 1/4W 1/2W 1/2W	D.		P3		PIN, CONNECTOR  < SOCKET >				
R469 R470 R471	1-247-713-11 1-249-421-11 1-249-421-11	CARBON CARBON	1K 2. 2K 2. 2K			F (G) F (G)		S12 521	8-719-987-63	SOCKET, CONNECT  < DIODE >  DIODE 1N4148N				
	*******	<pre>&lt; SWITCH &gt; SWITCH, PUSH ( ************************************</pre>	·			******	P.	J2 J3	1-573-142-21 1-568-978-31					
*	1-649-089-11	******					P.	J4	1-568-978-11	< RESISTOR >				
C322 C372	1-162-282-31 1-162-282-31		00PF 00PF	10% 10%		OV (G)	R R R	101 102 103 104 105	1-246-545-00 1-246-545-00 1-246-545-00 1-246-545-00 1-246-545-00	CARBON CARBON CARBON	1. OM 1. OM 1. OM 1. OM 1. OM	5%	1/4W 1/4W 1/4W 1/4W	
D517	8-719-987-63 1-564-339-61	DIODE 1N4148  < CONNECTOR > PIN, CONNECTOR					R R R	106 107 108 109	1-247-713-11 1-247-713-11 1-246-545-00 1-246-545-00 1-247-739-11	CARBON CARBON CARBON	1K 1K 1. OM 1. OM 100		1/4W 1/4W 1/4W 1/4W 1/2W	
J301		< JACK >  JACK (HEADPHON  RESISTOR >					R R R	2151 2152 2153 2154 2155	1-246-545-00 1-246-545-00 1-246-545-00 1-246-545-00 1-246-545-00	CARBON CARBON CARBON CARBON	1. 0M 1. 0M 1. 0M 1. 0M 1. 0M	5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
R329 R379	1-247-747-11 1-247-747-11	CARBON	470 470	5% 5%	1/2\ 1/2\ 1/2\		R R R	2156 2157 2158 2159 2160	1-247-713-11 1-247-713-11 1-246-545-00 1-246-545-00 1-247-739-11	L CARBON L CARBON O CARBON O CARBON	1K 1K 1. OM 1. OM 100	5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/2W	

### INPUT MAIN

Ref. No.	Part No.	Descrip	tion			Remark	Ref. No.	Part No.	Description				R	emark
		< RELAY	>				D501	8-719-230-02	DIODE 30	DF2				
DVE09	1-515-727-11	DDI AV					D502 D503	8-719-230-02 8-719-230-02		DF2 DF2				
K1502	1-313-121-11	< SWITC	н >				D503	8-719-230-02		DF2				
0101	. FM. 11P.11	0.000	OV 1.D	T (TAYOUT C	naman		5505	0 710 000 00	D. 1.11					
S101 S102	1-571-115-11 1-571-115-11						D505 D506	8-719-200-82 8-719-200-82		ES2 ES2				
							D507	8-719-200-82	DIODE 11	ES2				
******	********	******	****	*******	*****	*****	D508 D509	8-719-200-82 8-719-200-82		ES2 ES2				
*	A-4360-851-A	MAIN BO	ARD,	COMPLETE (	(AEP1)		D303	0 110 200 02						
		*****	****	*******	****		D510 D511	8-719-200-82 8-719-200-82		ES2 ES2				
*	A-4360-865-A	MAIN BO	ARD,	COMPLETE (	(AEP2)		D311	0 113 200 02	DIODE II.	LO2				
		*****	****	******	****				< IC >					
*	A-4360-868-A	MAIN BO	ARD,	COMPLETE (	(G)		IC501	8-759-111-68	IC uPC12	37HA				
		*****	****	*******	**				✓ TDANCICT	ΛD \				
		< CAPAC	ITOR	>					< TRANSIST	UR >				
C212	1 196 051 11	DI DOT		A77T	200	50V	Q309	8-729-203-45			3423-0			
C312 C313	1-126-051-11 1-102-233-00			47uF 33PF	20% 10%	50V 500V	Q310 Q311	8-729-107-53 8-729-141-10			2275A 985A			
C314	1-102-233-00			33PF	10%	500V	Q312	8-729-015-30			1530-Y			
C315	1-130-487-00	MYLAR		0. 022uF	5%	50V	Q313	8-729-015-31	TRANSISTOR	2SJ	201-Y			
C315	1-130-491-00	MYLAR		0. 047uF	5%	(AEP1, G) 50V (AEP2)	Q314	8-729-140-82	TRANSISTOR	2SA	988-PA	FAEA		
							Q359	8-729-203-45	TRANSISTOR	2SC	3423-0			
C316	1-130-491-00			0. 047uF	5%	50V (AEP2)	Q360	8-729-107-53			2275A			
C362 C363	1-126-051-11 1-102-233-00			47uF 33PF	20% 10%	50V 500V	Q361 Q362	8-729-141-10 8-729-015-30			985A 1530-y			
C364	1-102-233-00			33PF	10%	500V	#002	0 120 010 00	110101010101	DOIL	1000 1			
C365	1-130-487-00	MYLAR		0. 022uF	5%	50V	Q363	8-729-015-31			201-Y			
						(AEP1, G)	Q364	8-729-140-82	TRANSISTOR	2SA	988-PA	FAEA		
C365	1-130-491-00			0.047uF	5%	50V (AEP2)			< RESISTOR	>				
C366	1-130-491-00			0. 047uF	5%	50V (AEP2)	A DOLA	1 047 711 11	CADDON		600	mo/	1 / 419	T.
C501 C502	1-104-839-11 1-104-839-11			12000uF 12000uF	20% 20%	63V 63V		1-247-711-11 1-247-706-11			680 - 330	5% 5%	1/4W 1/4W	
C503	1-104-838-11			5600uF	20%	63V		1-212-994-00	-		330	5%	1/2W	
							<u></u> R317	1-212-974-00			47	5%	1/2W	
C504	1-104-838-11	D		5600uF	20% 10%	63V 160V	<u>^</u> R318	1-212-974-00	FUSIBLE		47	5%	1/2₩	F
C508 C509	1-136-880-11			z. zuF 1uF	20%	100V 100V	R319	1-217-151-00	RES. METAL	PLATE	0, 22		2W	
C510	1-126-064-11			220uF	20%	63V	R320	1-217-151-00					2W	
C517	1-126-023-11	ELECT		100uF	20%	25V	<b></b> AR321	1-247-721-11			4.7K		1/4W	F
C518	1-130-487-00	MVI AR		0. 022uF	5%	50V	R322 	1-249-460-11 1-212-962-00			15K 15	5% 5%	1/4₩ 1/2₩	E .
C519	1-126-023-11			100uF	20%	25V	Z17V25	1 212 302 00	TUSTBLE		10	3/0	1/41	Г
C520	1-130-471-00	MYLAR		0.001uF	5%	50V	<u></u> R324	1-212-962-00			15	5%	1/2₩	F
		< DIODE					R325	1-247-891-00			330K	5% 5%	1/4₩	D
		< DIODE	,					1-247-711-11 1-247-706-11			680 330	5% 5%	1/4W 1/4W	
D307	8-719-900-19	LED	SLR3	4UW5			£R366	1-212-994-00			330	5%	1/2W	
D308	8-719-987-63		1N41											
D309	8-719-987-63		1N41				<u>↑</u> R367	1-212-974-00			47	5%	1/2W	
D357 D358	8-719-900-19 8-719-987-63		SLR3 1N41					1-212-974-00 1-217-151-00		PLATE	47 0. 22	5%	1/2₩ 2₩	r
							R370	1-217-151-00	RES, METAL		0.22		2W	
D359	8-719-987-63	DIODE	1N41	48M			<u></u> R371	1-247-721-11	CARBON		4. 7K	5%	1/4₩	F

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.

Replace only with part number specified.

### MAIN MUT MUT LED POWER LED RELAY (J) SP

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description			Remark
R372	1-249-460-11	••••	15K	5%	1/4W				< CONNECTOR >			
<u></u> R374	1-212-962-00 1-212-962-00	FUSIBLE	15 15	5% 5%	1/2W 1/2W	F	* DR5	1-564-337-00	PIN, CONNECTO	R 3P		
R375 <u>↑</u> R501	1-247-891-00 1-212-849-00		330K 4. 7		1/4W 1/4W		*****	******	*******	*******	*****	******
R520 R521	1-247-721-11 1-249-461-11		4. 7K 18K	5% 5%	1/4W		*	1-639-368-11	RELAY (J) BOA			
R522 R523	1-247-881-00 1-247-725-11		120K 10K	5% 5%	1/4W 1/4W				< CONNECTOR >	ı		
R524	1-247-887-00	CARBON	220K	5%	1/4W		* CP9	1-568-202-11	PIN, CONNECTO	R (PC BOAF	RD) 10P	
R527	1-249-462-11	CARBON	22K	5%	1/4W		* DR6		PIN, CONNECTO		-,	
		< VARIABLE RESIS	TOR >						< SOCKET >			
		RES, ADJ, CARBON RES, ADJ, CARBON					CS10	1-561-115-00	SOCKET, CONNE	CTOR 6P		
							*****	******	*******	******	*****	******
		******	*****	*****	****	******	*	1-639-367-11				
*	1-649-091-11	MUT BOARD *******							******			
		< CONNECTOR >						1-533-233-11	HOLDER, FUSE			
CP5	1-568-577-11	PIN, CONNECTOR (	PC BOA	RD) 3P					< BUS BAR >			
		< RESISTOR >		·			* BB1 * BB2	1-560-242-61 1-560-242-61				
R515	1-247-706-11		330	5%	1/4₩	. IS			< CAPACITOR >	•		
R516	1-247-706-11		330	5%	1/4W		C319	1-130-467-00		470PF	5%	50V (G)
		< SWITCH >					C320	1-130-487-00	MYLAR	0. 022uF	5%	50V (G)
S205		SWITCH, PUSH (1				3)	C321 C369	1-130-487-00 1-130-467-00	MYLAR	0. 022uF 470PF	5% 5%	50V (G) 50V (G)
S208	1-572-143-11	SWITCH, SLIDE (S	OURCE	DIRECT	')		C370	1-130-487-00		0. 022uF	5%	50V (G)
******	**********	*******	*****	*****	****	*****	C371 <u>↑</u> C601	1-130-487-00 1-161-741-00		0. 022uF 0. 001uF	5% 10%	50V (G) 400V
*	1-649-092-11	MUT LED BOARD *******							< CONNECTOR :	<b>&gt;</b>		
		< SOCKET >					* CP10	1-580-854-11	PIN, CONNECTO	OR (PC BOA	RD) 6P	
* CS7	1-565-835-11	SOCKET, CONNECTO	IR 3P				SE1 SE2	1-564-320-00	PIN, CONNECTO	OR 2P	,	
# W1	1 000 000 11	< DIODE >	A. 01				* VH9 * VH10	1-564-321-00	PIN, CONNECTO	OR 2P		
DE10	0.710.001.40		CDI GOI	0.4			* 11110	1-304-321-21		Л( 21		
D518 D519	8-719-301-49 8-719-301-49		SEL281 SEL281						< DIODE >			
******	<***********	*******	*****	*****	****	*****	D515 D516	8-719-987-63 8-719-987-63				
*	1-649-093-11	POWER LED BOARD							< FUSE >			
		******					<b>▲F601</b>	1-532-350-00	FUSE, TIME-L	AG T4A		
		< DIODE >										
D512	8-719-313-40	LED	SEL15	16 <b>W</b>			1					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.



COIL       COIL	Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description	<u>n</u>		Remark
* L351 1-422-099-13 COIL, AIR-CORE  ** CRESISTOR >  ** CRESISTOR >  ** CRESISTOR >  ** CRESISTOR   10   5%   1/2%   (0)			< COIL >							< SOCKET :	· •		
R322 1-247-727-11 CARBON 10 5% 1/2W (D) R333 1-247-727-11 CARBON 10 5% 1/2W (D) R335 1-247-727-11 CARBON 10 5% 1/2W (D) R336 1-247-727-11 CARBON 10 5% 1/2W (D) R337 1-247-727-11 CARBON 10 5% 1/2W (D) R338 1-247-727-11 CARBON 10 5% 1/2W (D) R338 1-247-727-11 CARBON 10 5% 1/2W (D) R339 1-247-727-11 CARBON 257433- QP R330 1-515-501-00 RELAY RY504 1-515-501-00 RELAY RY504 1-515-501-00 RELAY RY504 1-515-501-00 RELAY RY504 1-555-920-11 SHITCH, PUSH (AC POWER) (1 KEY) (POWER) CSWITCH NOW (TERMINAL BOARD (SP) (SPEAKER) (ABP2) TM301 1-537-228-11 TERMINAL BOARD (SP) (SPEAKER) (ABP2) TM301 1-53								ı		•			
R333 1-247-727-11 CABBON 10 5% 1/2W (G) R378 1-247-727-11 CABBON 10 5% 1/2W (G) R378 1-247-727-11 CABBON 10 5% 1/2W (G) R383 1-247-727-11 CABBON 10 5% 1/2W (G) R601 8-729-141-03 TARASISTOR 2S373-0-Q R603 8-729-141-03 TARASISTOR 2S373-0-Q R603 8-729-141-03 TARASISTOR 2S373-0-Q R604 8-729-141-03 TARASISTOR 2S373-0-Q R605 8-729-620-05 TRANSISTOR 2S2603-EF R7501 1-515-501-00 RELAY R7501 1-515-501-00 RELAY R7501 1-555-02-01 SFITCH, FUSH (AC POWER) (1 KEY) (POWER)  C TERMINAL > R206 8-729-620-05 TRANSISTOR 2SC2603-EF R7801 1-557-227-11 TERMINAL BOARD (SP) (SPEAKER) (AEP2) R7801 1-557-227-11 TERMINAL BOARD (SP) (SPEAKER) (AEP2) R7801 1-557-228-11 TERMINAL BOARD (SP) (SPEAKER) (AEP2) R7801 1-507-228-11 TERMINAL BOARD (SP) (SPEAKER) (AEP2) R7801 1-507-228-1			< RESISTOR >	<b>&gt;</b>						< DIODE >			
R333 1-247-727-11 CARBON 10 5% 1/2₩ (G) R332 1-247-727-11 CARBON 10 5% 1/2₩ (G) R333 1-247-727-11 CARBON 10 5% 1/2₩ (G) R7450 1-515-501-00 RELAY R7503 1-515-501-00 RELAY R7503 1-515-501-00 RELAY R7504 1-515-501-00 RELAY R7504 1-515-501-00 RELAY R7503 1-554-920-11 SWITCH, PUSH (AC POWER) (I KEY) (POWER)  ∠ SWITCH \  ∠ SWITCH \  ∠ TERMINAL \  ∠ TERMINAL \  ∠ TERMINAL BOARD (SP) (SPRAKER) (AEP2) TM301 1-537-223-11 TERMINAL BOARD (SP) (SPRAKER) (AEP2) TM301 1-537-223-11 TERMINAL BOARD (SP) (SPRAKER) (AEP1) TM301 1-537-225-11 TERMINAL BOARD (SP) (SPRAKER) (AEP1) TM301 1-5	R328	1-247-727-11	CARBON	10	5%			D513	8-719-987-63	DIODE 11	N4148M		
R378   1-247-727-11 CARBON   10   5%   1/2% (G)   6001   8-729-194-57 TRANSISTOR   25C945-P   6002   8-729-141-03 TRANSISTOR   25X733-GP   6003   600								D514	8-719-987-63	DIODE 11	N4148M		
R382   1-247-727-11 CABRON   10   5%   1/2W (6)   G502   8-729-144-03 TRANSISTOR   25C945-P   G502   8-729-141-03 TRANSISTOR   25C945-P   G503   8-729-141-03 TRANSISTOR   25C945-P   G503   8-729-141-03 TRANSISTOR   25C945-P   G503   8-729-141-03 TRANSISTOR   25C9403-EF   G503   6-729-620-05 TRANSISTOR   25C2603-EF   G503   6-729-620-05 TRANSISTOR   2							(G)			< TRANSIS	ror >		
R383   1-247-727-11 CARBON   10   5%   1/2W (G)   CRELAY   CRELA							(G)			\ 110m010.	ion >		
CREATY   C	D000	1 047 707 11	CADDON	10	r <sub>o</sub> v	1 /017	(0)						
RYSO3   1-515-501-00 RELAY   QS06   8-729-620-05 TRANSISTOR   SSC2603-EF	R383	1-241-121-11	CARBON	10	5%	1/2#	(G)	, ,					
RYSO3			< RELAY >										
RY504   1-515-501-00 RELAY   Q\$66   8-729-620-05 TRANSISTOR   2SC2603-EF			( REBRIT )									F	
A_S601													
	RY504	1-515-501-00	RELAY					Q506	8-729-620-05	TRANSISTO	R 2SC2603-E	F	
**************************************			< SWITCH >							< RESISTOR	? >		
Carrinal	<b></b> ∆S601	1-554-920-11	SWITCH, PUSH	I (AC POWER	R) (1 KE	(POI	WER)	R203	1-246-545-00	CARBON	1. OM	5%	1/4W
TM301 1-537-227-11 TERMINAL BOARD (SP) (SPEAKER) (AEP2) TM301 1-537-228-11 TERMINAL BOARD (SP) (SPEAKER) (AEP1) TM301 1-537-228-11 TERMINAL BOARD (SP) (SPEAKER) (AEP1)  ***********************************								R204	1-247-721-11	CARBON	4.7K	5%	1/4W
TM301 1-537-227-11 TERMINAL BOARD (SP) (SPEAKER) (ABP2) TM301 1-537-228-11 TERMINAL BOARD (SP) (SPEAKER) (ABP1) TM301 1-537-228-11 TERMINAL BOARD (SP) (SPEAKER) (ABP1) TM301 1-537-235-11 TERMINAL BOARD (SP) (SPEAKER) (ABP1)  ***********************************			< TERMINAL >	•									
TM301 1-537-228-11 TERMINAL BOARD (SP) (SPEAKER) (G) TM301 1-537-235-11 TERMINAL BOARD (SP) (SPEAKER) (AEP1)  ***********************************				nn (on) (on		(		l .					
TM301 1-537-235-11 TERMINAL BOARD (SP) (SPEAKER) (AEP1)  ***********************************					-	•	)	R207	1-249-928-11	CARBON	1. 6K	5%	1/4W
**************************************							)	R208	1-249-586-11	CARBON	27K	5%	1/4W
* A-4360-852-A TONE BOARD, COMPLETE (AEP1, G)  ***********************************													
* A-4360-852-A TONE BOARD, COMPLETE (AEP1, G)  ***********************************	******	******	********	********	*****	****	*****	1					
**************************************		1 1000 050 1	movin novino	COMPLETED A	(APD1 /	٦)		1					
* A-4360-866-A TONE BOARD, COMPLETE (AEP2)	*	A-436U-85Z-A	•					KZ55	1-259-502-11	CARBON	4. /M	5%	1/4W
**************************************								1			4.7M	5%	1/4W
R259   1-247-148-00   CARBON   S. 1K   S%   1/4W	*	A-4360-866-A											
C201 1-106-351-00 MYLAR 2200PF 5% 200V R503 1-247-251-00 CARBON 3K 5% 1/2W C202 1-130-483-00 MYLAR 0.01uF 5% 50V R504 1-247-251-00 CARBON 3K 5% 1/2W C203 1-130-486-00 MYLAR 0.01uF 5% 50V R505 1-247-251-00 CARBON 3K 5% 1/2W C204 1-136-165-00 FILM 0.1uF 5% 50V R506 1-247-251-00 CARBON 3K 5% 1/2W C206 1-136-173-00 FILM 0.47uF 5% 50V R506 1-247-251-00 CARBON 3K 5% 1/2W C251 1-106-351-00 MYLAR 2200PF 5% 200V R507 1-247-251-00 CARBON 3K 5% 1/2W C252 1-130-483-00 MYLAR 0.01uF 5% 50V R508 1-247-251-00 CARBON 3K 5% 1/2W C253 1-130-486-00 MYLAR 0.01uF 5% 50V R509 1-247-251-00 CARBON 3K 5% 1/2W C253 1-130-486-00 MYLAR 0.01uF 5% 50V R501 1-247-251-10 CARBON 3K 5% 1/2W C254 1-136-165-00 FILM 0.1uF 5% 50V R501 1-247-251-10 CARBON 10K 5% 1/4W C254 1-136-165-00 FILM 0.1uF 5% 50V R510 1-247-251-10 CARBON 22K 5% 1/4W C256 1-136-173-00 FILM 0.47uF 5% 50V R511 1-249-462-11 CARBON 22K 5% 1/4W C256 1-136-173-00 FILM 0.47uF 5% 50V R512 1-249-465-11 CARBON 47K 5% 1/4W C512 1-126-219-11 ELECT 47uF 20% 63V R513 1-249-465-11 CARBON 47K 5% 1/4W C512 1-126-219-11 ELECT 3.3uF 20% 63V R517 1-247-249-00 CARBON 2.4K 5% 1/2W C513 1-126-13-11 ELECT 4.7uF 20% 63V R515 1-247-249-00 CARBON 2.4K 5% 1/2W C513 1-126-13-11 ELECT 4.7uF 20% 63V R515 1-247-249-00 CARBON 2.4K 5% 1/2W C513 1-126-13-11 ELECT 4.7uF 20% 50V R519 1-247-249-00 CARBON 2.4K 5% 1/2W C521 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-032-00 CARBON 2.4K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-032-00 CARBON 2.4K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-032-00 CARBON 2.4K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-032-00 CARBON 2.4K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-032-00 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01			*******	******	****			i					
C201 1-106-351-00 MYLAR			/ CADACITOD					1					
C202 1-130-483-00 MYLAR			< CAPACITOR	·				N502	1-241-121-11	CARDON	4. /K	<b>∂</b> 76	1/4W
C203 1-130-486-00 MYLAR	C201	1-106-351-00	MYLAR	2200PF	5%	200	V	R503	1-247-251-00	CARBON	3K	5%	1/2₩
C204 1-136-165-00 FILM					5%			R504			3K	5%	
C206 1-136-173-00 FILM													
C251 1-106-351-00 MYLAR 2200PF 5% 200V R508 1-247-251-00 CARBON 3K 5% 1/2W C252 1-130-483-00 MYLAR 0.01uF 5% 50V R509 1-247-251-00 CARBON 3K 5% 1/2W C253 1-130-486-00 MYLAR 0.01uF 5% 50V R510 1-247-725-11 CARBON 10K 5% 1/4W C254 1-136-165-00 FILM 0.1uF 5% 50V R511 1-249-462-11 CARBON 22K 5% 1/4W C256 1-136-173-00 FILM 0.47uF 5% 50V R512 1-249-465-11 CARBON 47K 5% 1/4W C512 1-126-062-11 ELECT 47uF 20% 63V R513 1-249-465-11 CARBON 47K 5% 1/4W C512 1-126-219-11 ELECT 3.3uF 20% 63V R517 1-247-249-00 CARBON 2.4K 5% 1/2W C513 1-126-163-11 ELECT 4.7uF 20% 50V R518 1-247-249-00 CARBON 2.4K 5% 1/2W C521 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-092-00 CARBON 24 5% 1/4W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C521 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-								ł					
C252 1-130-483-00 MYLAR 0.01uF 5% 50V R509 1-247-251-00 CARBON 3K 5% 1/2W C253 1-130-486-00 MYLAR 0.01uF 5% 50V R510 1-247-725-11 CARBON 10K 5% 1/4W C254 1-136-165-00 FILM 0.1uF 5% 50V R511 1-249-462-11 CARBON 22K 5% 1/4W C256 1-136-173-00 FILM 0.47uF 5% 50V R512 1-249-465-11 CARBON 47K 5% 1/4W C511 1-126-062-11 ELECT 47uF 20% 63V R513 1-249-465-11 CARBON 47K 5% 1/4W C512 1-126-219-11 ELECT 3.3uF 20% 63V R517 1-247-249-00 CARBON 2.4K 5% 1/2W C513 1-126-163-11 ELECT 4.7uF 20% 50V R518 1-247-249-00 CARBON 2.4K 5% 1/2W C521 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-092-00 CARBON 24 5% 1/4W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W	C206	1-136-173-00	FILM	0. 47uF	5%	501		R507	1-247-251-00	CARBON	3K	5%	1/2W
C253 1-130-486-00 MYLAR 0.018uF 10% 50V R510 1-247-725-11 CARBON 10K 5% 1/4W C254 1-136-165-00 FILM 0.1uF 5% 50V R511 1-249-462-11 CARBON 22K 5% 1/4W C256 1-136-173-00 FILM 0.47uF 5% 50V R512 1-249-465-11 CARBON 47K 5% 1/4W C511 1-126-062-11 ELECT 47uF 20% 63V R513 1-249-465-11 CARBON 47K 5% 1/4W C512 1-126-219-11 ELECT 3.3uF 20% 63V R517 1-247-249-00 CARBON 2.4K 5% 1/2W C513 1-126-163-11 ELECT 4.7uF 20% 50V R518 1-247-249-00 CARBON 2.4K 5% 1/2W C521 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-092-00 CARBON 24 5% 1/4W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W	C251			2200PF	5%			i			3K	5%	1/2W
C254 1-136-165-00 FILM													
C256 1-136-173-00 FILM 0. 47uF 5% 50V R512 1-249-465-11 CARBON 47K 5% 1/4W  C511 1-126-062-11 ELECT 47uF 20% 63V R513 1-249-465-11 CARBON 47K 5% 1/4W  C512 1-126-219-11 ELECT 3. 3uF 20% 63V R517 1-247-249-00 CARBON 2. 4K 5% 1/2W  C513 1-126-163-11 ELECT 4. 7uF 20% 50V R518 1-247-249-00 CARBON 2. 4K 5% 1/2W  C521 1-130-483-00 MYLAR 0. 01uF 5% 50V R519 1-247-092-00 CARBON 24 5% 1/4W  C522 1-130-483-00 MYLAR 0. 01uF 5% 50V R525 1-247-757-11 CARBON 2. 7K 5% 1/2W													
C511 1-126-062-11 ELECT 47uF 20% 63V R513 1-249-465-11 CARBON 47K 5% 1/4W C512 1-126-219-11 ELECT 3. 3uF 20% 63V R517 1-247-249-00 CARBON 2. 4K 5% 1/2W C513 1-126-163-11 ELECT 4. 7uF 20% 50V R518 1-247-249-00 CARBON 2. 4K 5% 1/2W C521 1-130-483-00 MYLAR 0. 01uF 5% 50V R519 1-247-092-00 CARBON 24 5% 1/4W C522 1-130-483-00 MYLAR 0. 01uF 5% 50V R525 1-247-757-11 CARBON 2. 7K 5% 1/2W													
C512 1-126-219-11 ELECT 3. 3uF 20% 63V R517 1-247-249-00 CARBON 2. 4K 5% 1/2W C513 1-126-163-11 ELECT 4. 7uF 20% 50V R518 1-247-249-00 CARBON 2. 4K 5% 1/2W C521 1-130-483-00 MYLAR 0. 01uF 5% 50V R519 1-247-092-00 CARBON 2. 4K 5% 1/2W C522 1-130-483-00 MYLAR 0. 01uF 5% 50V R525 1-247-757-11 CARBON 2. 7K 5% 1/2W	C256	1-136-173-00	riLM	U. 4/UF	5%	501		K51Z	1-249-465-11	CAKBON	47K	5%	1/4W
C513 1-126-163-11 ELECT 4. 7uF 20% 50V R518 1-247-249-00 CARBON 2. 4K 5% 1/2W C521 1-130-483-00 MYLAR 0. 01uF 5% 50V R519 1-247-092-00 CARBON 24 5% 1/4W C522 1-130-483-00 MYLAR 0. 01uF 5% 50V R525 1-247-757-11 CARBON 2. 7K 5% 1/2W								1					
C521 1-130-483-00 MYLAR 0.01uF 5% 50V R519 1-247-092-00 CARBON 24 5% 1/4W C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W													
C522 1-130-483-00 MYLAR 0.01uF 5% 50V R525 1-247-757-11 CARBON 2.7K 5% 1/2W													
< CONNECTOR >	CSZZ	1-100-483-00	MILAK	v. viur	∂ <i>1</i> 6	อบข		кэ25	1-241-151-11	MUDANA	Z. 7K	5%	1/ Z\
			< CONNECTOR	>									

\* CP11 1-560-531-00 PIN, CONNECTOR 5P

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.

Replace only with part number specified.

### TONE TONE (J) VR VR (J)

Ref. No.	Part No.	<u>Description</u> <u>Remark</u>	Ref. No.	Part No.	<u>Description</u> <u>Remark</u>
R526 R530	1-247-757-11 1-247-717-11		R211	1-214-881-00	METAL 5.1K 1% 1/2W
	1-247-251-00		R251	1-249-942-11	
R540	1-247-721-11			1-247-712-11	
R541	1-247-721-11	CARBON 4.7K 5% 1/4₩	R261	1-214-881-00	METAL 5.1K 1% 1/2W
R542 R543	1-247-757-11 1-247-757-11				< VARIABLE RESISTOR >
			RV204	1-223-400-11	RES, VAR, CARBON 120K/120K (ATTENUATOR)
		< VARIABLE RESISTOR >			< RELAY >
RV201	1-241-517-11	RES, VAR, CARBON 250K/250K (BALANCE)	DVC01	1 515 707 11	DELAV
		RES, VAR, CARBON 250K/250K (TREBLE) RES, VAR, CARBON 900K/900K (BASS)	KISUI	1-515-727-11	RELAT
KV203	1-223-402-11	NES, VAIL, CARDON SOUR/SOUR (DASS)			< SWITCH >
		< SWITCH >			
			S202	1-572-741-11	SWITCH, PUSH (1 KEY) (SOURCE DIRECT)
S201		SWITCH, PUSH (3 KEY) (SUB SONIC 15Hz)			
S203	1-572-738-11	SWITCH, PUSH (3 KEY) (MODE)	******	******	***********
S204 S206	1-5/2-/38-11	SWITCH, PUSH (3 KEY) (DIRECT INPUT) SWITCH, PUSH (2 KEY) (SPEAKERS A)	*	1-649-094-11	VR (J) BOARD
S200		SWITCH, PUSH (2 KEY) (SPEAKERS B)		1 010 001 11	******
5201		2,			
*****************				*********	************
*	1_6/0_000-11	TONE (J) BOARD			MISCELLANEOUS
T	1 045 050 11	*********	ļ }		******
		< CONNECTOR >	69		SWITCH, ROTARY (INPUT SELECTOR)
+ CD4	1 500 000 11	DIN CONNECTOD (DC DOADD) 10D	70		SWITCH, ROTARY (REC OUT SELECTOR) CORD, POWER (AEP2)
* CP4	1-568-202-11	PIN, CONNECTOR (PC BOARD) 10P	<u>1</u> 120 120 120 120 120 120 120 120 120 120 120		CORD, POWER (AEP2)
		< SOCKET >	121		PLUG, JUMPER
* CS6	1-563-106-11	CONNECTOR (SOCKET) 10P	<b>⚠</b> F601 <b>Q</b> 309		FUSE, TIME-LAG 4A TRANSISTOR 2SC3423-0
**********************					TRANSISTOR 25K1530-Y
**************************************			Q312 Q313		TRANSISTOR 2SJ201-Y
*	1-649-088-11	VR BOARD	Q359	8-729-203-45	TRANSISTOR 2SC3423-0
		*****			
			Q362		TRANSISTOR 2SK1530-Y
		< CONNECTOR >	Q363 <u>↑</u> T901		TRANSISTOR 2SJ201-Y TRANSFORMER, POWER
* CP1	1-568-202-11	PIN, CONNECTOR (PC BOARD) 10P	<u>1</u> 1301		TRANSFORMER, POWER
* CP2		PIN, CONNECTOR 5P	251001	1 120 002 2	11111101 011111111111111111111111111111
			******	*******	*************
		< DIODE >		A CORDORNAL	OO A DAGKING MATERIALS
D520	8-719-987-6	3 DIODE 1N4148M			S & PACKING MATERIALS
D320	0-119-901-0	3 DIODE 104140M		****	**************************************
		< PLUG >	ļ	3-755-923-1	MANUAL, INSTRUCTION
			1		(English, French, Spanish, Portuguese) (AEP)
* EH1	1-564-506-1	1 PLUG, CONNECTOR 3P		3-755-923-4	MANUAL, INSTRUCTION (Corres Dutch Swedish Italian)
		< RESISTOR >	*	4-929-219-0	(German, Dutch, Swedish, Italian)
		( MAIOTOR /	*		1 INDIVIDUAL CARTON
R111	1-249-490-1	1 CARBON 27K 5% 1/2W		•	
R161	1-249-490-1		*****	********	************
R201	1-249-942-1				
R202	1-247-712-1	1 CARBON 820 5% 1/4W	I		
					The common to identified by monty

Note:
There are two types of power transformer (T901) in German model. When ordering the power transformer, check the part No. of it.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
	H	**************************************	
#1 #2 #3 #4 #5 #6 #7	7-682-547-09 7-685-647-79 7-685-650-79 7-682-548-09 7-682-565-09 7-684-024-04	SCREW +KTP 2.6X8 TYPE2NON-SLIT SCREW +BVTT 3X6 (S) SCREW +BVTP 3X10 TYPE2 N-S SCREW +BVTP 3X16 TYPE2 SLIT SCREW (3X8) SCREW +B 4X16 N 4, TYPE 2	
#8 #9 #10 #11 #12 #13	7-685-876-09 7-685-649-79 7-683-255-58 7-682-566-09	SCREW +BVTP   3X12 TYPE2 N-S     SCREW +BVTT   3X16 (S)     SCREW +BVTP   3X14 TYPE2 IT-3     SET SCREW 5X6 HEXAGON SOCKET     SCREW +B 4X20     SCREW, TAPPING (G)	

### TA-F505ES